PATENT
Atty. Dkt. No.: 67146403-1009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: YAJUN GUO	)	Group Art Unit:	1644
	)		
	)	Examiner:	Dibrino, M.
Serial No.: 09/216,062	)		
	)		
Filed: December 18, 1998	)		
	)		
For: CELLULAR VACCINES AND IMMUNOTHERAPEUTICS AND METHODS FOR THEIR PREPARATION	)		

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3-22-02

Commissioner for Patents
Washington, D.C. 20231

RESPONSE

Dear Sir:

In response to the Office Action mailed August 13, 2001, the time for filing a response to which has been extended by the accompanying Petition for Extension of Time to February 13, 2002, please enter the following amendments and consider the following remarks.

AMENDMENTS

Please cancel claims 50-52 and amend claims 45 and 70 without prejudice as follows:

--45. A method of preparing a pharmaceutical composition or therapeutic vaccine, said method comprising the steps of:

(a) providing a plurality of hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells;

(b) treating said hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells to increase the levels of primary or costimulatory molecules in said cells;

(c) providing a plurality of a bispecific monoclonal antibodies, each of said antibodies comprising a binding site for a CD28, 4-1BB or CTLA-4 molecule on the surface of T cells in a patient mammal and a binding site for a gp55, gp95, gp115 or gp210 antigen;

(d) attaching said bispecific monoclonal antibodies to said cells; and

(e) thereafter collecting a pharmaceutically effective amount of said cells with said bispecific monoclonal antibodies attached thereto; wherein said steps (c) and (d) are performed either before or after said step (b).

70. An immunogenic composition, comprising:

a pharmaceutically effective amount of one or more isolated autologous hepatocellular carcinoma cells, lymphoma cells, colon carcinoma cells or gastric cancer cells which express one or more primary or costimulatory molecules at a level higher than in said cells in a patient mammal; and

a pharmaceutically effective amount of one or more bispecific monoclonal antibodies comprising a binding site for a CD28, 4-1BB or CTLA-4 molecule on the surface of T cells in a patient mammal, and a binding site for a gp55, gp95, gp115, or gp210 antigen, wherein said

bispecific monoclonal antibodies are attached to said cells, and wherein said composition is substantially free of bispecific monoclonal antibodies not attached to said cells.